REMARKS:

The objections in the 7/14/2005 Office Action shall be addressed in order of their occurrence in that Office Action.

The 7/14/2005 Office Action states "Claims 1-4 are rejected under 35 USC 103(a) as being unpatentable over Lagner et al 6,264,401 in view of Bertet et al 5,695,008."

The 7/14/2005 Office Action states in part with respect to Langner et al.: "but (Langner) does not show the electrical conductor surrounded by a composite material with fibers of high strength embedded in a matrix material with glass fibers and the matrix material is selected from thermoset resins and thermoplastic resins, whereby said thermoset resins include epoxy and vinyl ester, and whereby said thermoplastic resins include PEEK, PEKK, and nylon."

The 7/14/2005 Office Action further states in part: "Bertet shows a similar heated umbilical means with the electrical conductor surrounded by a composite material with fibers of high strength ...."

The 7/14/2005 Office Action further states in part: "Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lagner, as taught by Bertet, to include glass fibers and resins in the electrical conductor to improve the heat transfer characteristics of the composite material to properly maintain flow for produced hydrocarbons."

However, applicant wishes to point out that Bertet shows a heated umbilical means "for the purpose of polymerizing the

perform" - ie, setting up the polymer material that is primarily used to form a casing. Please see Column 7, lines 26-27 in Bertet. Please also see Claim 12 in Bertet which states in part: "wherein at least one of the strands of the sleeve is replaced by electrically conductive wire enabling the perform to be heated for polymerization purposes,...". Accordingly, Bertet does not teach, or suggest, using an electrical heater to prevent waxes and hydrates from forming within any flowline. Accordingly, applicant respectfully submits that this is not a "similar umbilical means" as quoted from the 7/14/2005 Office Action.

The prior art references does not contain any suggestion (express or implied) that they be combined, or that they be combined in the manner suggested. Bertet provides "An assembly comprising a radially expandable tubular perform for casing a well..." as quoted from the first several lines of Claim 1. Claim 1 is the only independent Claim in Bertet and it pertains to forming casings in a well. Bertet does not provide any apparatus that is to be "installed within a subsea flowline containing produced hydrocarbons as an immersion heater means to prevent waxes and hydrates from forming..." as stated in applicant's Claim 1.

Langner et al. describes a permanently installed "pipe-in-pipe subsea pipeline" (Claim 1 therein) that is electrically heated by conducting current through the inner electrically insulated pipe. Langner does not describe installing an electrically heated umbilical within an already existing flowline.

Applicant's invention solves a different problem than the references. Langner et al. teaches a permanently installed heated pipe-in-pipe subsea pipeline to prevent the formation of waxes and hydrates. Bertet et al. provides a new type of casing. Applicant's invention provides a heated umbilical means which may be retrofitted into an already existing subsea flowline to prevent the formation of waxes and hydrates.

Therefore, the prior art references does not contain any suggestion (express or implied) that they be combined, or that they be combined in the manner suggested.

Each of the prior art references is complete and functional in itself, so there would be no reason to use parts from, or add, or substitute, parts to any reference.

In Bertet, "at least one of the strands of the sleeve is replaced by electrically conductive wire..." (Claim 12). Langner shows a "pipe-in-pipe subsea pipeline". Those skilled in the art would find it physically impossible to combine the references in the manner suggested. A portion of the "strands of the sleeve" in Bertet could not replace the inner current conducting pipe in Langner. It would be necessary to make modifications, not taught in the prior art, in order to combine the references in the manner suggested. Accordingly, applicant submits that Claim 1 is allowable over Langner in view of Bertet for this reason alone.

Further, even if the prior art references were combined, they would not meet all the features of Claim 1.

The invention is classified in a crowded art; therefore a small step forward should be regarded as significant.

Accordingly, applicant respectfully submits that Claim 1 is allowable over Langner et. al. and in view of Bertet et al.

With respect to Claim 2, Langner shows using an insulated inner current conducting pipe that is electrically isolated from an outer pipe to prevent formation of waxes and hydrates. This is a "pipe-in-pipe" system. In Langner, the inner pipes are welded together (Figure 7B, column 6, lines 65-66). Then, the outer pipes are welded together (Figure 7C, column 7, lines 15-16). Langner does not teach or suggest inserting the assembly into an already existing flowline as claimed by applicant in Claim 2. The 7/14/2005 Office Action states on page 3 with respect to Langner: "figure 1, considered pre-existing since the claim language does not preclude manufacturing of the flowline where a preexisting or built flowline has the conductive outer pipe 32 attached thereto, inherent to manufacturing." Applicant respectfully disagrees with this statement which applicant believes to be erroneous. The assembly process and the welds explicitly described in Langner precludes retrofitting an electrically heated interior subassembly into a long outer pipe that is already in place. Instead, Langner teaches making the heated flowline itself in one welded piece as described therein. Accordingly, because Langner fails to teach or suggest inserting the interior assembly into an already existing flowline as claimed by applicants in Claim 2, applicant respectfully submits that Claim 2 is allowable over Langner in view of Bertet.

With respect to Claim 3, the 7/14/2005 Office Action states in part: "As concern claim 3, Lagner further shows a method of using an umbilical conveyance means 10 to convey into an existing subsea flowline....". Applicant wishes to respectively point out that element 10 in Langner is the entire pipe-in-pipe subsea pipeline, and that element 10 is not described as a conveyance means in Langner. Please refer to column 3, lines 7-12 of Langner, which state: "Pipeline 10 is shown to be a pipe-in-pipe flowline 30 having an electrically conductive carrier or outer pipe 32 and an electrically conductive product flowline or inner pipe 34 arranged longitudinally and substantially concentrically with the outer pipe." Langner does not suggest putting element 10 into yet another pipeline which would be very expensive and would not make any sense. For the reasons stated in this paragraph, and for the reasons above, applicant submits that Claim 3 is allowable over Langner in view of Bertet.

Claim 4 reads closely on Claim 3, except here an "electrically heated umbilical means" is described. For the reasons above, applicant submits that Claim 4 is also allowable over Langner in view of Bertet.

Applicant wishes to respectfully point out that he has responded to every single objection in the Office Action dated 7/14/2005, and applicant respectfully submits that Claims 1-4, and 5-6, are in a condition for allowability.

Applicant requested a telephone interview with Examiner on several occasions. Applicant appreciates the telephone message from Examiner on/about September 8, 2005. Applicant thereafter tried to reach the Examiner by telephone, but has been unsuccessful. Therefore, applicant has prepared this

response without the benefit of obtaining answers to certain questions from the Examiner. If there are errors herein in substance or format, applicant requests help and assistance from Examiner to correct those errors. Thank you.

PAYMENT OF FEES:

Applicant does not believe any fees are due with this correspondence. However, if the applicant has made a mistake on the payment of any fees herein, applicant requests that any such deficiencies be billed to Account No. 50-0499 that was established on 3/20/1998. Fees on patents and patent applications entirely owned, or owned in part, by William Banning Vail III may be made from this account. William Banning Vail III is doing business as an inventor under the name of "Vail's Inventions". Marilyn L. Vail, the wife of William Banning Vail III, may also direct that fees be paid from this Account No. 50-0499. If for unforeseen reasons funds are not available in that account, please let applicant know as soon as possible and said deficiencies will be paid immediately. In the event of overpayment of any fees herein, applicant respectfully requests that any overpayment be deposited into Account No. 50-0499.

Pro-Se Case

This case herein is a pro-se case. Therefore, in the event that the USPTO objects to any, or all of the claims herein, applicant respectfully requests assistance from the Examiner under MPEP Section 707.07(j) to draft an acceptable claim based upon the disclosure and language in the application.

Further, in the event that the Examiner rejects the claims, applicant requests that Examiner direct applicant to the claims closest to allowability, and if possible, applicant further requests that Examiner preliminarily mark-up one of said claims in a future office action to further aid applicant to achieve allowability of at least one claim in an expeditious fashion.

DECLARATION:

As applicant, I hereby verify that all statements made herein of my own knowledge are true and that all statements made on my information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such wilful false statements may jeopardize the validity of the application or any patent issuing thereon.

This application is filed pro-se. The applicant is using the book entitled "Patent It Yourself", Eleventh Edition, by David Pressman, and if there are errors, please advise the inventor, and such errors will be corrected immediately.

(Entire Signature on Next Page for Clarity)

Please address all correspondence involving this case to the co-inventor at the below defined address. Thank you.

Yours respectfully submitted